



Catalog Number:	MC11086	Product Type:	Small Molecule
Bio-Activity:	Protein Phosphatase PP2A inhibitor	CAS #:	56-25-7
Research Categories:	Cell death, cancer	Chemical Name:	3 α ,7 α -Dimethylhexahydro-4,7-epoxyisobenzofuran-1,3-dione
Solubility:	Soluble in DMSO (up to 20 mg/ml) or in Ethanol (up to 5 mg/ml).	Molecular Formula:	C10H12O4
Purity:	> 98%	Molecular Weight:	196.20
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

Application Notes

Description/Data:

Inhibits protein phosphatase 2A ($K_i=0.19 \mu\text{M}$) and PP1 ($K_i=1.1 \mu\text{M}$) [1]. Displays >500-fold selectivity over PP2B. Suppresses growth and migration of PANC-1 pancreatic cancer cells via phosphorylation and degradation of β -catenin [2]. Arrests G2/M transition via JNK/Sp1-dependent down-regulation of CDK1 [3]. Cell permeable.

Warning: Avoid skin contact, may cause skin irritation or blistering.

References:

- 1) Honkanen (1993) Cantharidin, another natural toxin that inhibits the activity of serine/threonine protein phosphatases types 1 and 2A; FEBS Lett. 330 283
- 2) Wu et al. (2014) PP2A inhibitors suppress migration and growth of PANC-1 pancreatic cancer cells through inhibition on the Wnt/ β -Catenin pathway by phosphorylation and degradation of β -catenin; Oncol. Rep., 32 513
- 3) Gong et al. (2015) PP2A inhibitors arrest G2/M transition through JNK/Sp1-dependent down-regulation of CDK1 and autophagy up-regulation of p21; Oncotarget, 6 18469

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